ABSTRACT

METHOD, COMPUTER SYSTEM AND COMPUTER PROGRAM PRODUCT FOR DETERMINING THE EQUIVALENCE OF TWO BLOCKS OF ASSIGNMENT STATEMENTS

The present invention discloses a method for determining, in a computer environment, the equivalence, if any, of two blocks of assignment statements in a computer program for use in compiler optimization of source code, program verification, program proving, and like computing tasks. The method, *inter alia*, successfully eliminates, from a block of assignment statements, all intermediate variables and statements which are identities and also those which are irrelevant to the computation of the output variables and brings the block to a form suitable for comparing two or more blocks of assignment statements. A system for carrying out the above method and a computer program product incorporating the method are also disclosed.